

function section 103 for performing radio communication, an image pickup section 104 which may be a CCD camera or the like for picking up a still picture or a moving picture and converting it into a digital signal, a display section 105 which may be an LCD (liquid crystal display) unit or the like for displaying an image or characters thereon, an operation section 106 which includes ten-keys and several function keys, a sound inputting section 107 which may be a microphone for inputting sound or voice to be communicated, a sound outputting section 108 which may be an earphone or a speaker, a cell or battery 109, and a power supply section 110 for stabilizing power of the battery 109 and distributing the stabilized power to the components of the portable communication terminal to enable operation of the portable communication terminal.

Referring now to FIG. 2, the radio communication function section 103 includes a reception electric field intensity detection section 201 and transmits a result of detection by the reception electric field intensity detection section 201 to the control section 101. The control section 101 includes a reception electric field intensity display function section 202 for displaying a reception electric field intensity display on the display section 105 based on reception electric field intensity information from the radio communication function section 103, and a communication quality alarm function section 203 for instructing the display section 105 or the sound outputting section 108 to display an alarm display or emit alarm

sound when the circuit quality deteriorates below a predetermined value.

Further, the control section 101 includes an image synthesis section 204 for producing a transmission image by synthesizing a still picture or a moving picture picked up by the image pickup section 104 built in the portable telephone terminal body and a reception electric field display or an image stored in the memory section 102. The control section 101 further includes a reception electric field intensity transmission setting section 205 for setting whether or not a reception electric field intensity image should be added to a transmission image in accordance with an operation of the operation section 106, and a communication quality alarm transmission setting section 206 for setting whether or not an alarm image should be used as a transmission image when a communication quality alarm is generated.

Now, operation of the portable telephone terminal is described in detail with reference to FIGS. 1 to 5.

First, operation upon normal communication is described.

The radio communication function section 103 measures a reception electric field intensity by means of the reception electric field intensity detection section thereof 201 during waiting or communication of the portable telephone terminal. A result of the measurement is displayed as a reception level display on the display section 106 by means of the reception electric field intensity display function section 202 of the

control section 101 as in a conventional portable telephone terminal.

Communication by a video and an audio is performed in the following manner by control of the control section 101.

5 In particular, an image picked up by the image pickup section 104 and sound inputted from the sound inputting section 107 are transmitted. On the other hand, a received video is displayed on the display section 105 and a received audio is outputted by the sound outputting section 108. Further,
10 operation relating to the communication is performed by the operation section 106.

An image to be transmitted from the portable telephone terminal upon such communication by a video and an audio as described above is shown as a transmission image example 301
15 in FIG. 3. As shown in FIG. 3, a transmission image includes a reception level display 303 of the portable telephone terminal itself added by the image synthesis section 204 of the control section 101 to an image (in the example of FIG. 3, an image of a person) picked up by the image pickup section 104.

20 It is to be noted that such a transmission image example 301 as described above is displayed when the user operates the operation section 16 to set in advance to transmit the reception level display of the portable telephone terminal itself. However, if the user sets that the reception level display of
25 the portable telephone terminal itself should not be transmitted, then the reception level display of the portable telephone